

Claims

- Substant*
1. A medical device for use within a body cavity, the medical device comprising:
an elongated body portion defining a lumen, said body portion comprising a
proximal end, a distal end, a proximal portion, and a distal portion; and,
a retention module disposed proximal to said proximal end of said elongated body
portion, said retention module comprising a fixation element attached to the elongated
body portion by a tether connector.
 2. The medical device of claim 1 wherein said fixation element is substantially
buoyant.
 3. The medical device of claim 1 wherein said fixation element comprises a size and
configuration that prohibits the passage of said fixation element from the lumen of the
urinary bladder into the lumen of the ureter.
 4. The medical device of claim 1 wherein said fixation element is a substantially
planar spiral.
 5. The medical device of claim 1 wherein said fixation element is a substantially
helical spiral.
 6. The medical device of claim 1 wherein said proximal portion of said elongated
body portion is substantially more compressible than the other portions of said elongated
body portion.
 7. The medical device of claim 1 further comprising a plurality of the retention
modules.
 8. The medical device of claim 1 wherein said tether connector is substantially
elastic.
 9. The medical device of claim 1 wherein said tether connector is substantially rigid.

1 10. The medical device of claim 1 wherein said distal portion of said elongated body
2 portion comprises a planar spiral loop for retention in the renal pelvis.

1 11. The medical device of claim 1 wherein said elongated body portion is
2 substantially rigid to prevent its deformation during insertion through the ureter.

1 12. The medical device of claim 1 wherein said elongated body portion defines a
2 plurality of openings along its length.

1 13. The medical device of claim 1 wherein said fixation element is substantially
2 spherical.

1 14. The medical device of claim 13 wherein the diameter of said fixation element is
2 greater than the diameter of the lumen of the ureter.

1 15. A method of treating at least partial ureteral obstruction of a patient, comprising:

2 a. providing a medical device comprising an elongated body portion
3 defining a lumen, the body portion comprising a proximal end, a distal end, a proximal
4 portion, and a distal portion, the medical device further comprising a retention module
5 disposed proximal to said proximal end of the elongated body portion, said retention
6 module comprising a fixation element attached to the elongated body portion by a tether
7 connector; and

8 b. inserting the medical device into the patient such that said fixation element
9 is positioned in the bladder of the patient.

1 16. The method of claim 15 wherein said fixation element is substantially buoyant.

1 17. The method of claim 15 wherein the fixation element comprises a size and
2 configuration that prohibits the passage of said fixation element from the lumen of the
3 urinary bladder into the lumen of the ureter.

1 18. The method of claim 15 wherein said device further comprises a plurality of the
2 retention modules.

1 19. The method of claim 15 wherein said tether connector is substantially elastic.

1 20. The method of claim 15 wherein said tether connector is substantially rigid.

1 21. The method of claim 15 wherein said distal portion comprises a planar spiral loop
2 for retention in the renal pelvis.

1 22. The method of claim 15 wherein said elongated body portion is substantially rigid
2 to prevent its deformation during insertion through the ureter.

1 23. The method of claim 15 wherein said elongated body portion defines a plurality of
2 openings along its length.

1 24. The method of claim 15 wherein said fixation element is substantially spherical.

1 25. The method of claim 24 wherein the diameter of said fixation element is greater
2 than the diameter of the lumen of the ureter.

1 26. A medical device for use within a body cavity, the medical device comprising:
2 an elongated body portion defining a lumen, said elongated body portion
3 comprising a proximal end, a distal end, a proximal portion and a distal portion and said
4 elongated body portion including a plurality of pores, said distal portion comprising a
5 planar spiral; and,
6 at least one retention module attached to said proximal end of said elongated body
7 portion, said retention module comprising at least one buoyant, spherical fixation element
8 attached to the proximal end of said elongated body portion by a substantially elastic
9 tether connector.

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